

DDA SUBJECT FILE COPY

ER-5046X-86

ROUTING AND TRANSMITTAL SLIP		Date
		4 NOV 86
TO: (Name, office symbol, room number, building, Agency/Post)		Initials Date
1. DIRECTOR OF SECURITY		
2.		
3.		
4.		
5.		
Action	File	Note and Return
Approval	For Clearance	Per Conversation
As Requested	For Correction	Prepare Reply
Circulate	For Your Information	See Me
Comment	Investigate	Signature
Coordination	Justify	

## REMARKS

#1 - ACTION, IF APPROPRIATE. (A GOOD LAUGH OTHERWISE)

DD/A REGISTRY  
FILE: 45-1

DO NOT use this form as a RECORD of approvals, concurrences, disposals, clearances, and similar actions

FROM: (Name, org. symbol, Agency/Post)	Room No.—Bldg.
	Phone No.

5041-102

\* U.S.G.P.O.: 1983-421-529/320

OPTIONAL FORM 41 (Rev. 7-76)  
Prescribed by GSA  
FPMR (41 CFR) 101-11.206

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## ROUTING SLIP

TO:		ACTION	INFO	DATE	INITIAL
1	DCI				
2	DDCI				
3	EXDIR				
4	D/ICS				
5	DDI				
6	DDA	X			
7	DDO				
8	DDS&T				
9	Chm/NIC				
10	GC				
11	IG				
12	Compt				
13	D/OLL				
14	D/PAO	X →			ae
15	D/PERS				
16	VC/NIC				
17					
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19					
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21					
22					
SUSPENSE		Date			

Remarks

3637 (10-81)

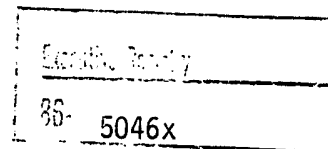
H/ Executive Secretary  
31 OCT 86  
Date

TO: DDA	
ROOM NO. 7D18	BUILDING HQS
REMARKS: Please forward to appropriate office. Thank you.	
FROM: DCI/PAO	
ROOM NO. 1016	BUILDING Ames
FORM NO. 1 FEB 56 241 REPLACES FORM 36-8 WHICH MAY BE USED.	

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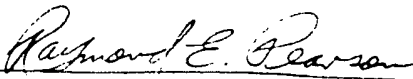
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P R O J E C T     R E A L F I R E

An  
Innovation Proposal  
For A  
Police Firing Range  
Which Will Give A  
Very High Degree Of Realism  
To  
Gunfire Exchange Training

  
Proposal By: Raymond E. Pearson

TO: Police Chiefs And Other Law Enforcement Directors

FROM: Raymond E. Pearson

SUBJ: PROJECT REALFIRE: An Innovation Proposal For A  
Specialized Police Firing Range Which Will Give  
A Very High Degree Of Realism To Gunfire Exchange  
Training

I submit herewith my innovation proposal for a specialized firing range on which police officers fire live ammunition at mirror images of live actors representing criminal assailants. Also, the actors fire live ammunition at mirror images of the police officers. The mirrors are made of sheets of pliable, reflective Mylar plastic fitted to lightweight wooden frames and panels.

Specially constructed building configurations prevent any direct line of fire between police and actors. Actors and police are restricted to firing only at mirror images.

The police officers never see their own images in the mirrors. The officers can see the actors' images, hear the actors and even smell them. Live, verbal exchanges can occur. For example, the assailant actor can shout obscenities at the officer and the officer can yell commands to the actor. Officers and actors can take cover and fire from concealment behind various physical objects.

This live interfacing, combined with the firing of live ammunition, will give a physical and psychological level of living realism heretofore not attained on firing ranges. It will make the police officers more proficient and will help save their lives.

  
Raymond E. Pearson

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## FEATURES OF THE REALFIRE SYSTEM

### (1) INTENDED USES

To train police officers in a gunfire exchange environment which gives a high degree of realism not attainable on ordinary police firing ranges.

The firing of live ammunition, plus the visual and audio interfacing with live actors will psychologically create a high level of living realism in a police officers' mind. This sense of realism will pay dividends by increasing the proficiency of the officers and will help them to survive gunfire situations on the streets.

### (2) CONSTRUCTION

The REALFIRE system can be installed in an existing building, or, the system can be built integrally with a structure constructed specially for the system. A building's basement is an especially ideal location for the REALFIRE range.

Realism can be enhanced by constructing and fitting the range to resemble, for example, a drive-in grocery with a game room, or, a restaurant with a bar and lounge. The set-up should be furnished and stocked just like an actual business establishment. For purposes of illustration I have selected the drive-in grocery store with gameroom configuration. The toilet also has the mirror system to reflect an actor's image so that a very close-range gunfire exchange can occur in the toilet area. The store section and gameroom contain actual groceries, vending machines, game machines and the other usual products found in a regular store of that type.

When any one of the plastic mirrors has received enough bullet holes to require replacement, the mirror and its framework can easily be slid out of position and replaced by an unused mirror.

All walls are bullet-proof. Any window representation could be a dummy set-up painted onto the bullet-proof wall.

On the drawing the dashed lines forming right angles are not to be crossed by police. Actors are not to cross the straight, dashed lines. Low, decorative bannisters (each with a gate) are placed along the dashed lines. (only one shown.) The police and actors do not use the gates. The gates add realism to the set-up and can be used by maintenance personnel.

*Raymond E. Pearson*

These bannister-barriers could be rigged electronically to sound a warning alarm if they are crossed.

Please note that, in the area around the x within a circle, a police officer could be caught in a 3-way crossfire by three assailant actors (with toilet door open). With toilet door closed, 2-way crossfire.

To prevent the range from becoming too overly familiar to officers, the configuration and furnishings could be periodically rearranged.

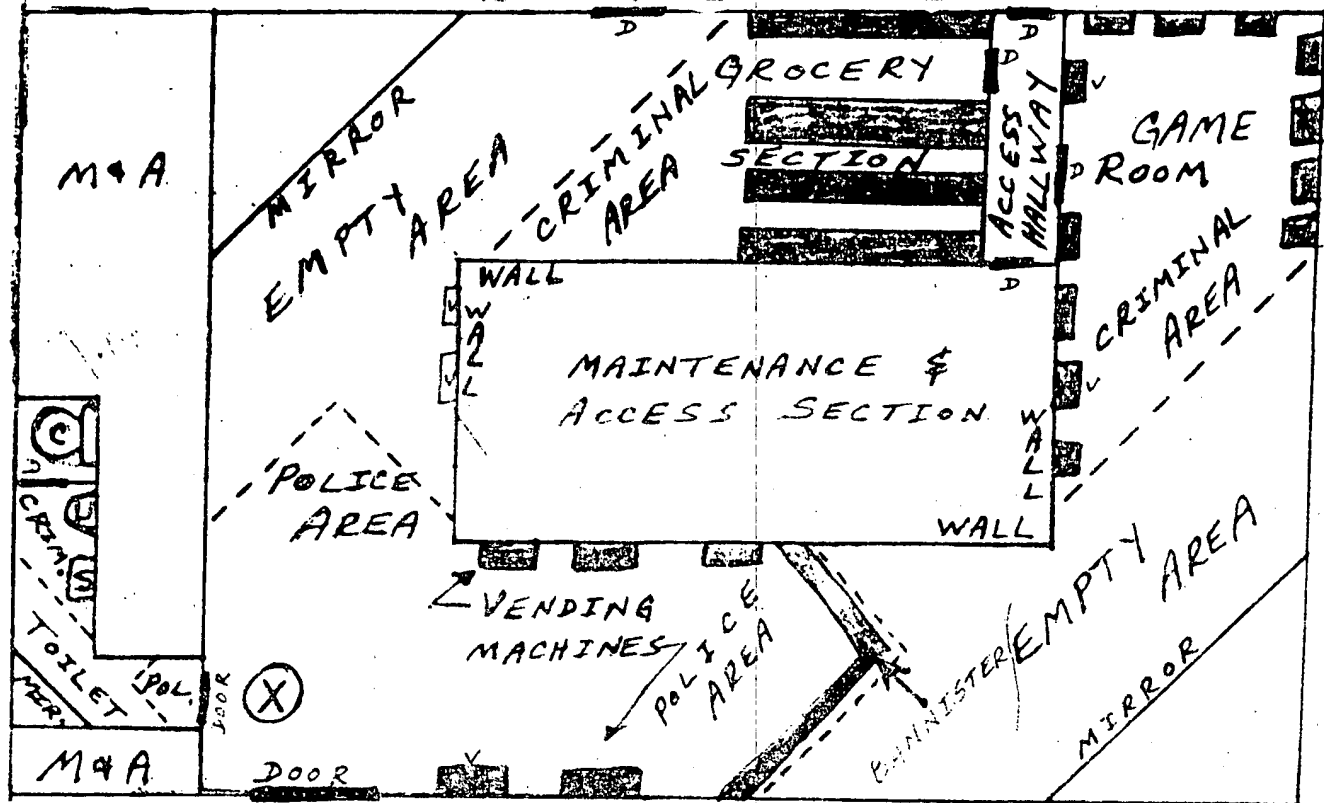
Human observers could score the firing exchange by looking through observation ports. Also, a closed-circuit TV taping system could be a part of a scoring system.

When an officer fires at an actor-assailant's image, the officer will most likely be able to see the bullet hole appear on (or near) the actor's image, and vice versa.

I emphasize that, with police and actors in their respective, designated areas, there is no direct line-of-fire between them. To prevent any ricochet of a bullet (highly unlikely) the interior sides of the walls (including behind the mirrors) are covered with whatever material would most efficiently prevent a ricochet.

Raymond E. Pearson

# REAL FIRE TOP VIEW



## PARKING AREA

S = SINK  
U = URINAL  
C = COMODE

M&A = Maintenance & access  
D = Door  
POL = POLICE AREA  
V = Vending machine

MIR = MIRROR  
CRIM. = CRIMINAL AREA

Raymond E. Pearson

### MODE OF OPERATION

What does a police officer experience during a gunfire exchange training session at the REALFIRE range?

Let's take a look!

It's 5:00 a.m. You're driving the patrol car. Your partner is Sergeant Jim Anderson. The two of you have been patrolling the streets since midnight. You've made seven arrests and carried two men to jail. You're both tired.

The call comes over the radio. Code Romeo Fox. That's REALFIRE. You know it's a training exercise but you also know it's the closest thing in training to a real, on-the-street gun battle. This is your first time for REALFIRE. Same for Anderson. But your friends on the force who've been there have briefed you.

There's never any advance notice. You key the mike and tell the dispatcher, "Unit four-two-seven enroute to Romeo Fox." The dispatcher acknowledges and then dispatches unit eight-one-five to take over your sector.

The dispatcher briefs you while you're enroute to the REALFIRE drive-in grocery store. Armed robbery in progress. The robbers are two young white males. That's all the dispatcher knows.

Four minutes later you're turning in at the store. You know it's a training exercise but your adrenalin is pumping like hell! Sergeant Anderson radios the dispatcher that you're on the scene and you're both going into the store.

You tell Anderson to take the game room. You take the grocery section. It's quiet. You can hear the refrigeration unit running. That's all. You spot the clerk crouched down behind the cash register. He's o.k. You tell him to stay just like he is.

"Goddamned cop!" Then the sound of the shotgun blast beats hell out of your ears. But Sergeant Anderson had seen the robber and taken cover. The robber's shot misses. So does Anderson's return fire. The robber disappears through a door between the game room and the grocery section.

Now, behind you, you hear a noise coming from the toilet. The toilet door opens a couple of inches. You're in the open. No cover. You could be caught in a three-way crossfire. You drop to prone position but the toilet door closes shut. Out of the corner of your eye you see Sergeant Anderson moving toward your position. A noise from the grocery section distracts your watch on the toilet door. Then all hell breaks loose. Everything happening at once!

Right beside your head Anderson's gun goes off. You look toward the last grocery shelf and see the robber crumple to the floor. His shotgun clatters to the floor as he falls.

*Raymond E. Pearson*



You tell Anderson to watch the game room and the grocery section. You're going after the one in the restroom. You move to the toilet door and throw it open. Nothing. You don't see anybody. But you hear him. He's in the commode stall. You yell at him to come out with his hands up. Nothing. You pull the pin from a tear-gas cannister and toss the cannister under the stall wall.

He stumbles out coughing. But he's still holding his gun. You tell him to drop it but he does the stupid thing. He starts to raise his gun toward you. Time has run out. You fire two quick rounds at him. You can see the bullet holes from your shots appear on the mirror image in his chest area. You know it's a mirror image but it looks and sounds so damn real your heart is pumping adrenalin at one helluva rate!

The robber gets off one wild shot but misses because he's already been hit by your bullets. The actor is doing some good work but the muzzle flash and the sound from his gun are real enough. And you're both using real, live ammo!

He collapses to the floor and you stare at his face. He's about twenty-one years old. He's robbed his last store. Same for the one that Anderson shot.

It's over. You and Sergeant Anderson walk out of the store. It's been more instructive than a lot of the real, but routine, action on the streets.

You don't need to wait for the scoring results. You both now know that each one of you can handle the real thing.

# # # #

*Raymond E. Pearson*

MONETARY COMPENSATION

If PROJECT REALFIRE benefits your organization it is requested that you make monetary compensation in an amount proportional to the amount of benefit.

Compensation is on a non-mandatory, honor basis.

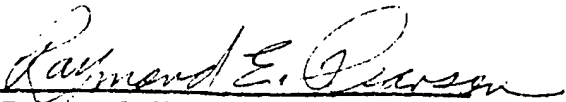
Usage of PROJECT REALFIRE is limited to law-enforcement organizations.

When sending compensation, please make check payable to:

Raymond E. Pearson

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Signed: \_\_\_\_\_

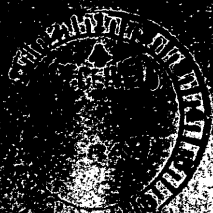
  
Raymond Ewell Pearson  
Houston (HARRIS COUNTY) Texas

REP:f PR

E N D

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28 OCT 1963

FIRST CLASS

William Casey, Director  
U.S. Central Intelligence Agency  
Washington, D.C. 20505

